

Claims:

1. A behavioral biometrics-based user verification system for use with a motion-based input device, said system comprising a data interception unit for receiving inputs from a user, a behavior analysis unit operatively coupled to said data interception unit, and a behavior comparison unit operatively coupled to said behavior analysis unit, wherein said system translates behavioral biometrics information into representative data, stores and compares different results, and outputs a user identity result.
2. The user verification system of claim 1, wherein said system is suitably configured for dynamic monitoring.
3. The user verification system of claim 2 wherein the dynamic monitoring is suitably configured for passive data collection.
4. The user verification system of any one of claims 1 to 3, wherein said system is suitably configured for real-time monitoring.
5. The user verification system of any one of claims 1 to 4, further comprising secure communication protocols operatively coupled to said data interception unit.
6. The user verification system of any one of claims 1 to 5, wherein said data interception unit is configured to identify data from a mouse as one of movement, drag and drop, point and click, and silence, such that in use, said system receives data from a mouse.

7. The user verification system of claim 6, wherein said data interception unit is further configured to characterize movement based on at least one of average speed, average traveled distance, and direction of movement.
8. The user verification system of any one of claims 1 to 6, wherein said data interception unit is configured to identify actions from a keyboard on the basis of dwell time and flight time such that in use, said system receives data from a keyboard.
9. The verification system of claim 7 or 8, wherein said data interception unit is further configured to identify action from a mouse as one of movement, drag and drop, point and click, and silence, such that in use, said system receives data from a mouse and from a keyboard.
10. The user verification system of claim 9, wherein said data interception unit is further configured to characterize mouse movement based on at least one of average speed, average traveled distance, and direction of movement.
11. A method of characterizing a user comprising the steps of moving a motion-based input device, collecting data from said device, processing said data, and modeling said data using suitably selected algorithms to develop a signature for a user.
12. The method of claim 11, further comprising comparing said signature with a signature of an authorized user.
13. The method of claim 11 or 12, further comprising filtering said data after processing and before modeling to reduce noise.

14. The method of any one of claims 11 to 13, further comprising passively collecting data.
15. The method of any one of claims 11 to 14, further comprising collecting, processing and modeling said data in real-time.
16. The method of any one of claims 11 to 15, further characterized as moving a mouse, collecting data from said mouse, processing said data, and modeling said data using suitably selected algorithms to develop a signature for a user.
17. The method of claim 16, wherein said collecting data further comprises characterizing movement based on at least one of average speed, average traveled distance, and direction of movement.
18. The method of any one of claims 11 to 15, further characterized as using a keyboard, collecting data from said keyboard, processing said data, and modeling said data using suitably selected algorithms to develop a signature for a user.
19. The method of claim 18, wherein said collecting data is further comprises characterizing movement based on flight time and dwell time.
20. The method of claim 18 or 19, further comprising collecting data from a mouse, processing said data and modeling said data using suitably selected algorithms to develop a signature for a user based on both mouse and keyboard data.

21. The method of claim 20, wherein said collecting data further comprises characterizing movement based on at least one of average speed, average traveled distance, and direction of movement.